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| EXAMINER |
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KURR, JASON RICHARD

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2615

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/716,660 | Applicant(s) LEBLANC ET AL. | |
| | Examiner Jason R. Kurr | Art Unit 2615 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 8, 10, 12, 19 and 22 are objected to because of the following informalities:

Claim 8 recites the limitation "said software" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the zone assignments" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the master/satellite status" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "said analog audio input port" in line 4 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "said first transceiver" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 discloses the system of claim 1 further comprising "a capability for". The use of this term does not provide a positive limitation to the claim. "A Capability" is not a physical part of a system, it merely describes possible functioning of physical elements. In the present case "A capability" has been claimed as a physical element, thus rendering the claim as indefinite. The Examiner suggests changing line 2 of the claim to read, "a manual input to the master system panel ..."

Claim 24 contains the trademark/trade name "Ethernet". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe IEEE standard 802.3 and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al (US 5,406,634).

With respect to claim 25, Anderson discloses a programmable speaker amplifier control system (fig.2 #22), comprising: processing means for processing electronic signals (fig.2 #32); communicating means (fig.2 #35) for communicating between said processing means and a digitally enabled speaker amplifier (fig.2 #37); and configuring means (fig.2 #28) for configuring said processing means in response to externally applied signals (fig.2 #24, col.4 ln.20-32).

With respect to claim 26, Anderson discloses the programmable speaker amplifier control system of claim 25, further comprising: interrogating means (fig.1 #10) for interrogating said digitally enabled speaker amplifier by an interrogation routine (col.3 ln.53-62).

With respect to claim 27, Anderson discloses the programmable speaker amplifier control system of claim 25, further comprising: recovering means (fig.2 #47,26) for recovering system configuration information from automated records of the status of a system panel maintained in nonvolatile storage media (col.3 ln.56-62).

With respect to claim 28, Anderson discloses a process for configuring a speaker amplifier system (fig.1,2), comprising the steps of: communicating between an external

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signal source (fig.1 #13,15) and a system panel (fig.1,2 #22); and configuring a system panel (col.2 ln.19-42).

With respect to claim 29, Anderson discloses the process for configuring a speaker amplifier system of claim 28, further comprising the steps of: interrogating a system panel with a command that causes the interrogated system panel to respond to the command by transmitting a report of its configuration; and reading the response of a system panel so interrogated (col.3 ln.56-62).

With respect to claim 30, Anderson discloses the process for configuring a speaker amplifier system of claim 28, further comprising the steps of: displaying the response of a system panel to interrogation; and storing the response of a system panel so interrogated (fig.6, col.6 ln.53-65). It is implied that the parameter values (i.e. "response of a system panel") are stored/remain fixed after being set (i.e. "interrogated") by a user.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 and 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (US 5,406,634) in view of Ajamian (US 6,870,936 B1).

With respect to claim 1, Anderson discloses a master system panel (fig.1), comprising: a digital signal transceiver (fig.1 #16,18); and a command execution facility comprising a processor (fig.1 #10), wherein said command execution facility is capable of accepting and executing a command received via said transceiver (col.4 ln.47-57).

Anderson does not disclose expressly wherein the master system panel comprises an analog audio signal transmitter.

Ajamian discloses a control platform for multiple signal routing wherein a master system panel (fig.6 #120) comprises an analog signal transmitter (fig.6 #136 "Monitor Out", col.10 ln.1-15).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the analog signal transmitter of Ajamian in the master system panel of Anderson.

The motivation for doing so would have been to allow an operator to monitor the audio signals transmitted via transmission line #24 through headphones from the location of the master system panel. This would allow the operator to make sure the appropriate audio signals are transmitted to their respective audio amplifier systems.

With respect to claim 2, Anderson discloses the master system panel of claim 1, further comprising: a set of software to control said command execution facility (col.4 ln.33-35).

With respect to claim 3, Anderson discloses the master system panel of claim 1, further comprising: an audio input port (fig.1 #13,15); an audio amplifier (fig.2 #37); and an audio output port (fig.1 #16).

With respect to claim 4, Anderson discloses the master system panel of claim 1, wherein said command execution facility further comprises nonvolatile data storage (col.1 ln.37-40).

With respect to claim 5, Anderson discloses the master system panel of claim 1, further comprising: a capability for manual input to the master system panel of at least one instruction (fig.1 #20, col.3 ln.42-48); an instruction to suspend normal operation (col.5 ln.12-27); a command execution facility (fig.1 #14) for externally applied commands following suspension of normal master system panel operation; and a command execution facility (fig.1 #14) for normal operation following reception of an externally applied command to resume normal operation (col.3 ln.53-55).

With respect to claim 6, Anderson discloses a programmable speaker amplifier control system, comprising: a master system panel (fig.1) comprising: a digital signal

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transceiver (fig.1 #16,18); and a command execution facility comprising a processor (fig.1 #10), wherein said command execution facility is capable of accepting and executing a command received via said transceiver (col.4 ln.47-57); a speaker amplifier (fig.2 #37); and a communication subsystem interconnecting said master system panel and said speaker amplifier (fig.1,2 #24,26).

Anderson does not disclose expressly wherein the master system panel comprises an analog audio signal transmitter.

Ajamian discloses a control platform for multiple signal routing wherein a master system panel (fig.6 #120) comprises an analog signal transmitter (fig.6 #136 "Monitor Out", col.10 ln.1-15).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the analog signal transmitter of Ajamian in the master system panel of Anderson.

The motivation for doing so would have been to allow an operator to monitor the audio signals transmitted via transmission line #24 through headphones from the location of the master system panel. This would allow the operator to make sure the appropriate audio signals are transmitted to their respective audio amplifier systems.

With respect to claim 7, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising a set of commands to accept system panel configuration instructions by way of said communication subsystem (col.2 ln.32-39).

With respect to claim 8, Anderson discloses the programmable speaker amplifier system of claim 6, wherein said software further comprises a set of commands to control at least one digitally enabled speaker amplifier (col.2 ln.32-42).

With respect to claim 9, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising a command to define the state of a relay (fig.2 #34) that is an integral part of a speaker amplifier system element and bears an assignable unit number and device number (col.4 ln.47-57).

With respect to claim 10, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising at least one command to define the zone assignments for at least one digitally enabled speaker amplifier (col.1 ln.15-34, col.4 ln.47-57).

With respect to claim 11, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising a command to assign a new address to a master system panel (col.4 ln.51-55).

With respect to claim 12, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising a command to define the master/satellite status of a speaker amplifier system panel (col.2 ln.32-39).

With respect to claim 13, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising a command to associate a control input switch closure line to a speaker amplifier system panel with a zone assignment (col.2 ln.32-39).

With respect to claim 15, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising a command to acquire current contents of configuration memory in a speaker amplifier system panel (col.3 ln.60-62).

With respect to claim 16, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising a command to terminate external control (fig.2 #41, col.5 ln.1-11), thereby restoring normal operation for the master system panel in a programmable speaker amplifier system. It is implied that the system of Anderson returns to normal operation after the operator ceases to use the override functions of the external control.

With respect to claim 17, Anderson discloses the programmable speaker amplifier control system of claim 6, wherein said speaker amplifier further comprises: an analog audio signal input port (fig.2 "input of #37"); an amplifier (fig.2 #37) to amplify signals impinging at said analog audio signal input port; a power supply (fig.2 "power supply") to convert electrical power from an available source (fig.2 "local power line") to

the form required for amplifier operation; and a loudspeaker (fig.2 #39).

With respect to claim 18, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising: a digital communication input port (fig.2 #30); a digital communication signal decoder (fig.2 #28, col.4 ln.20-22); a digital command interpreter (fig.2 #32); a nonvolatile storage element (col.4 ln.33-35); and a digital reply generator (fig.2 #47).

With respect to claim 19, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising: an electronic switch (fig.2 #34) under the control of said digital command interpreter; and an electrical interconnect circuit permitting establishment and interruption of the signal path from said analog audio signal input port to said loudspeaker (fig.2 #32, col.4 ln.58-68).

With respect to claim 20, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising: a first transceiver (fig.1 #16,18) in said master system panel; and a second transceiver (fig.2 #28,47) in said speaker amplifier, capable of establishing bidirectional communication with said first transceiver.

With respect to claim 21, Anderson discloses the programmable speaker amplifier system of claim 6, further comprising a satellite system panel (fig.1 #22) under

the control of said master system panel.

With respect to claim 22, Anderson discloses the programmable speaker amplifier system of claim 6, however does not disclose expressly wherein the system further comprises a booster extending the physical and electrical range of said first transceiver. Official Notice is taken that signal boosters are well known in the art and at the time of the invention it would have been obvious to one of ordinary skill in the art to use a booster at the output of the transmitter #16 of Anderson. The motivation for doing so would have been to extend the range the intelligent speakers #22 can be placed from the master system panel #10,11.

With respect to claim 23, Anderson discloses the programmable speaker amplifier system of claim 6, however does not disclose expressly wherein said communications subsystem further comprises an RS-485 bidirectional differential serial communications port and associated interface electronics. Official Notice is taken that the RS-485 interface standard is well known in the art and would have been obvious to a person of ordinary skill in the art use in place of the transmitter #16, receiver #18 communication system #24,26 in the invention of Anderson. The motivation for using this interface would have been to allow for communicating at longer distances and higher bit rates than other standards such as the RS-232 standard.

With respect to claim 24, Anderson discloses the programmable speaker amplifier system of claim 6, however does not disclose expressly wherein said communications subsystem further comprises an IEEE 802.3 Ethernet bidirectional serial communications port and associated interface electronics. Official Notice is taken that the IEEE 802.3 standard is well known in the art and would have been obvious to a person of ordinary skill in the art use in place of the transmitter #16, receiver #18 communication system #24,26 in the invention of Anderson. The motivation for using this interfaces standard would have been to allow for high-speed communication between the master system panel and the intelligent speakers.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (US 5,406,634) in view of Ajamian (US 6,870,936 B1) and in further view of Strohbeck et al (US 6,650,232 B1).

With respect to claim 14, Anderson discloses the programmable speaker amplifier system of claim 6, however does not disclose expressly wherein the system further comprises a command to specify whether a speaker amplifier system panel is to operate in conjunction with a backup power source.

Strohbeck discloses a sound control system wherein a backup power source (i.e battery) is provided to power a speaker upon the failure or disconnection of the main power source (col.1 ln.6-26).

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At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the backup power source of Strohbeck in the speaker units #22 of Anderson.

The motivation for doing so would have been to provide alternative power to the speakers in the event that the main power is cut off or disconnected. This would provide backup power in cases of emergency, wherein an alarm would continue to sound even after main power is cut off.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Laitinen et al (US 6,091,826) discloses a method for implementing a sound reproduction system for a large space.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Kurr whose telephone number is (571) 272-0552. The examiner can normally be reached on M-F 10:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 273-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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